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The Airline Quality Rating 2002

Brent D. Bowen Dean E. Headley

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Brent Bowen is Director and Professor, Aviation Institute, University of Nebraska at Omaha. He has been appointed as a Graduate Faculty Fellow of the University of Nebraska System-wide Graduate College. Bowen attained his Doctorate in Higher Education and Aviation from Oklahoma State University and a Master of Business Administration degree from Oklahoma City University. His Federal Aviation Administration certifications include Airline Transport Pilot, Certified Flight Instructor. Advanced-Instrument Ground Instructor, Aviation Safety Counselor, and Aerospace Education Counselor. Dr. Bowen's research interests focus on aviation applications of public productivity enhancement and marketing in the areas of service quality evaluation, forecasting, and student recruitment in collegiate aviation programs. He is also well published in areas related to effective teaching. His professional affiliations include the University Aviation Association, Council on Aviation Accreditation, World Aerospace Education Association, International Air Transportation Research Group, Aerospace Education Association, Alpha Eta Rho International Aviation Fraternity, and the Nebraska Academy of Science. He also serves as program director and principal investigator of the National Aeronautics and Space Administration funded Nebraska Space Grant Consortium.

Dean Headley is Associate Professor of Marketing and Barton Fellow, W. Frank Barton School of Business, and Faculty Associate of the National Institute for Aviation Research at Wichita State University. He holds a Doctorate in Marketing and Statistics from Oklahoma State University, a Master of Business Administration Degree from Wichita State University, and a Master of Public Health Degree from the University of Oklahoma. Dr. Headley's research interests include methodology development for measurement of service quality, the connection between service quality and consumer behavior, consumer choice processes in service settings, and the effects of marketing activities on consumers and providers of services.

Dr. Bowen's and Dr. Headley's research on the Airline Quality Rating (AQR) has met with national and international acceptance and acknowledgment. The Airline Quality Rating has been featured on *ABC's Good Morning America, The Cable News Network, The Today Show, C-Span,* on network news, in *USA Today,* in *Aviation Week and Space Technology,* and in numerous other national and international media. Bowen and Headley have served as invited expert witnesses before the U.S. House of Representatives Committee on Government Operations and have served as invited speakers and panelists for such groups as the National Academy of Sciences/Transportation Research Board. The work of Bowen and Headley has been recognized with awards from the American Marketing Association, the American Institute of Aeronautics and Astronautics, Embry-Riddle Aeronautical University, the Travel and Transportation Research Association, and others. The AQR research has been published in the Journal of Aviation/Aerospace Education and Research, Journal of Air Transportation, as well as other journals, proceedings, textbooks, and research monographs.

AIRLINE QUALITY RATING 2002

Brent D. Bowen, University of Nebraska at Omaha Dean E. Headley, Wichita State University

Abstract

The Airline Quality Rating (AQR) was developed and first announced in early 1991 as an objective method of comparing airline quality on combined multiple performance criteria. This current report, Airline Quality Rating 2002, reflects monthly Airline Quality Rating scores for 2001. AQR scores for the calendar year 2001 are based on 15 elements that focus on airline performance areas important to air travel consumers.

The Airline Quality Rating 2002 is a summary of month-by-month quality ratings for the 11 largest U.S. airlines operating during 2001. Using the Airline Quality Rating system of weighted averages and monthly performance data in the areas of on-time arrivals, involuntary denied boardings, mishandled baggage, and a combination of 12 customer complaint categories, airlines comparative performance for the calendar year of 2001 is reported. This research monograph contains a brief summary of the AQR methodology, detailed data and charts that track comparative quality for domestic airline operations for the 12-month period of 2001, and industry average results. Also, comparative Airline Quality Rating data for 2000 are included for each airline to provide historical perspective regarding performance quality in the industry.

The Airline Quality Rating (AQR) System

The majority of quality ratings available rely on subjective surveys of consumer opinion that are infrequently done. This subjective approach yields a quality rating that is essentially non-comparable from survey to survey for any specific airline. Timeliness of survey-based results can be a problem in the fast-paced airline industry as well. Before the Airline Quality Rating, there was effectively no consistent method for monitoring the quality of airlines on a timely, objective, and comparable basis. With the introduction of the AQR, a multi-factor, weighted average approach became available that had not been used before in the airline industry. The method relies on taking published, publicly available data that reports actual airline performance on critical quality criteria important to consumers and combines them into a rating system. The final result is a rating for individual airlines with interval scale properties that is comparable across airlines and across time.

The Airline Quality Rating (AQR) is a weighted average of multiple elements (see Table 1) important to consumers when judging the quality of airline services. Elements considered for inclusion in the rating scale were screened to meet two basic criteria; 1) an element must be obtainable from published data sources for each airline; and 2) an element must have relevance to consumer concerns regarding airline quality. Data for the elements used in calculating the ratings represent performance aspects (on-time arrival, mishandled baggage, involuntary denied boardings, and 12 customer complaint areas) of airlines that are important to consumers. All of the elements are reported in the Air Travel Consumer Report maintained by the U.S. Department of Transportation.

Weights were established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate as important (on a scale of 0 to 10) in judging airline quality. Also, each weight and element was assigned a plus or minus sign to reflect the nature of impact for that criterion on a consumer's perception of quality. For instance, the criteria of on-time arrival performance are included as a positive element because it is reported in terms of on-time successes, suggesting that a higher number is favorable to consumers. The weight for these criteria is high due to the importance most consumers place on this aspect of airline service. Conversely, the criteria that includes mishandled baggage is included as a negative element because it is reported in terms of mishandled bags per passengers served, suggesting that a higher number is unfavorable to consumers. Because having baggage arrive with passengers is important to consumers the weight for this criteria is also high. Weights and positive/negative signs are independent of each other. Weights reflect importance of the criteria in consumer decision-making, while signs reflect the direction of impact that the criteria should have on the consumer's rating of airline quality. When all criteria, weights and impacts are combined for an airline and averaged over the year, a single interval scaled value is obtained. This value is comparable across airlines and across time periods.

The Airline Quality Rating criteria and the weighted average methodology allow a very focused comparison of airline domestic performance. Unlike other consumer opinion approaches that rely on consumer surveys and subjective opinion, the AQR continues to use a mathematical formula that takes multiple weighted objective criteria into account in arriving at a single, fully comparable rating for airline industry performance. The Airline Quality Rating provides both consumers and industry watchers a means for looking at comparative quality for each airline on a timely basis, using objective, performance-based data. Over the years, the Airline Quality Rating has often been cited as an industry standard for comparing airline performance. With the continued global trend in airline operations alliances, the argument becomes even stronger for the Airline Quality Rating to be used as a standard method for comparing the quality of airline performance for international operations as well.

Table 1

AIRLINE QUALITY RATING CRITERIA, WEIGHTS AND IMPACT

	CRITERIA	WEIGHT	IMPACT (+/-)
ОТ	On-Time	8.63	+
DB	Denied Boardings	8.03	
MB	Mishandled Baggage	7.92	
CC	Customer Complaints Flight Problems Oversales Reservations, Ticketing, an Fares Refunds Baggage Customer Service Disability Advertising Tours Animals Other	7.17 d Boarding	

Data for all criteria is drawn from the U.S. Department of Transportation's monthly *Air Travel Consumer Report*. (http://dot.gov/airconsumer/)

The formula for calculating the AQR score is:

$$AQR = \frac{(+8.63 \times OT) + (-8.03 \times DB) + (-7.92 \times MB) + (-7.17 \times CC)}{(8.63 + 8.03 + 7.92 + 7.17)}$$

What the Airline Quality Rating Tells Us About 2001

The Airline Quality Rating industry average score shows an industry that is improving in quality relative to customer performance criteria. All of the largest carriers, except Delta Airlines, show improvement in their overall AQR scores for 2001. AQR scores for Delta in 2001 were virtually unchanged from their industry leading score in 2000. America West Airlines registered the largest improvement in AQR score. AQR results for 2001 indicate that:

For 2001 the **overall industry** average AQR score was better than in 2000. As an industry, the AQR criteria shows that on-time arrival percentage improved (77.4% in 2001 compared to 72.6% in 2000), involuntary denied boardings per passenger served decreased (1.04 per 10,000 passengers in 2000 compared to 0.86 per 10,000 passengers in 2001), mishandled baggage rates improved (5.29 per 1,000 passengers in 2000 versus 4.55 per 1,000 passengers in 2001), and consumer complaint rates decreased (2.11 per 100,000 passengers in 2001 compared to 2.98 per 100,000 passengers in 2000). Taken together the AQR score for the industry was -1.60 for 2001 compared to -2.05 in 2000.

Alaska Airlines had a positive gain in their AQR score for 2001. They improved their rate of mishandled baggage from an industry leading 3.48 per 1,000 passengers in 2000 to an industry leading 3.00 in 2001. Consistent solid improvement in the areas of on-time performance, involuntary denied boardings, customer complaints, and baggage handling, helped move Alaska Airlines from the second ranked carrier in 2000 to the top rated carrier in 2001.

America West Airlines had the largest improvement in AQR score of all the airlines rated. On-time performance improved by over 9% in 2001(65.5% in 2000 to 74.8% in 2001). The rate of mishandled baggage improved from 6.62 in 2000 to 4.22 in 2001, the most improvement of all airlines rated. Consumer complaints were reduced by over 50%, (7.51 in 2000 to 3.72 in 2001), reflecting the most improved rate of all airlines. Denied boarding rates were also the most improved for all airlines, moving from 1.12 per 10.000 passengers served in 2000 to 0.38 in 2001.

American Airlines' AQR score for 2001 was improved, as was nearly all other airlines. Their improvement in AQR score reflects better performance for on-time arrivals (72.9% in 2000 compared to 75.9% in 2001), mishandled baggage rates (5.50 in 2000 compared to 4.60 in 2001), denied boardings rates (0.42 in 2000 compared to 0.36 in 2001), and customer complaints. Most notable was the third best improvement in customer complaint rates (3.54 in 2000 to 2.51 in 2001) of all airlines.

American Eagle Airlines is included in the AQR for the first time in 2001. Positive aspects of American Eagle performance for 2001 come in better than industry performance in denied boardings (0.43 per 10,000 passengers compared to 0.86 for the industry) and customer complaints (1.70 per 100,000 passengers compared to 2.11 for the industry). On-time performance was 71.0% compared to 77.4% for the industry. The mishandled baggage rate of 7.36 per 1,000 passengers was the highest of all airlines rated.

Continental Airlines posted improved performance in all of the criteria in the AQR. Better performance in on-time arrivals (80.7% in 2001 versus 78.1% in 2000), denied boardings rate (1.51 in 2001 versus 1.80 in 2000), mishandled baggage (4.29 in 2001 versus 5.35 in 2000), and customer complaint rate (2.23 in 2001 versus 2.84 in 2000) was not enough, given improvement by other airlines, to improve the overall ranking position of the airline.

Delta Airlines' AQR score for 2001 (-1.48) was virtually unchanged from their industry best 2000 AQR score (-1.47). This lack of gain, while other airlines were showing improvement, dropped them from the number one ranking to fifth among the eleven airlines rated. Delta showed improvement in on-time arrival percentage (78.0% in 2001 compared to 75.3% in 2000)) and mishandled baggage rate (4.11 in 2001 versus 4.49 in 2000). The negatives for Delta were a more than doubled rate for denied boardings, (2001 rate of 0.77 compared to 2000 rate of 0.33), and an increase in customer complaint rate (2.16 in 2001 compared to 2.01 in 2000). Delta was the only airline to register an increase in customer complaint rate and denied boarding rate of all the airlines rated in 2001.

Northwest Airlines posted improvements in all AQR elements for 2001. On-time arrival performance moved from 77.4% in 2000 to 79.7% in 2001. Denied boardings were reduced from 0.57 per 10,000 passengers in 2000 to 0.45 per 10,000 passengers in 2001. The rate of mishandled baggage dropped from 5.24 per 1,000 passengers in 2000 to 4.19 per 1,000 passengers in 2001. An improvement in customer complaint rate from 2.61 per 100,000 passengers in 2000 to 1.97 per 100,000 passengers in 2001 helped move the airline from a number five ranking in 2000 to number three ranking in 2001.

Southwest Airlines performance in 2001 took them from the third rated airline to the fourth position in 2001. They recorded the third best improvement (6.5% increase to an industry leading 81.7%) in on-time arrival percentage of the eleven airlines rated. Involuntary denied boarding rates, mishandled baggage rates, and customer complaint rates were all improved in 2001. Southwest Airlines is consistently the airline with the lowest customer complaint rate in the industry (0.38 per 100,000 passengers in 2001 compared to an industry rate of 2.11 per 100,000 passengers).

Trans World Airlines improved in all areas except mishandled baggage in 2001. On-time arrivals, denined boardings and customer complaint rates were all improved in 2001. TWA was the only airline rated that saw it's mishandled baggage rate per 1,000 passengers increase (6.06 in 2000 increased to 6.35 in 2001). Even with gains in three of the four areas rated, Trans World airlines slipped to the bottom of the eleven airline field.

United Airlines had the greatest improvement in on-time arrival performance, going from 61.4% in 2000 to 73.5% in 2001. Performance regarding denied boardings (1.43 per 10,000 passengers in 2000 compared to 0.92 in 2001), mishandled baggage (5.07 per 1,000 passengers in 2001 compared to 6.57 in 2000), and consumer complaints (3.24 per 100,000 passengers in 2001 compared to 5.30 in 2000) were all improved for 2001. Consumer complaints dropped by nearly 40% in 2001 for United.

US Airways shows improvement in all of the criteria tracked for 2001. This improvement pulled the airline up to the second rated spot for 2001 from number four in 2000. Looking at some of the details reveals that US Airways performed better in on-time arrival percentage (78.2% in 2001 compared to 72.3% in 2000), denied boarding rate (0.34 in 2001 compared to 0.65 in 2000), mishandled baggage rate (3.86 in 2001 compared to 4.76 in 2000), and customer complaint rate (1.87 in 2001 compared to 2.59 in 2000).

Previous Airline Quality Reports

Bowen, Brent D., Dean E. Headley and Jacqueline R. Luedtke (1991), <u>Airline Quality Rating</u>, National Institute for Aviation Research Report 91-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1992), <u>Airline Quality Rating Report 1992</u>, National Institute for Aviation Research Report 92-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1993), <u>Airline Quality Rating Report 1993</u>, National Institute for Aviation Research Report 93-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1994), <u>Airline Quality Rating Report 1994</u>, National Institute for Aviation Research Report 94-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1995), <u>Airline Quality Rating Report 1995</u>, National Institute for Aviation Research Report 95-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1996), <u>Airline Quality Rating 1996</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1997), <u>Airline Quality Rating 1997</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1998), <u>Airline Quality Rating 1998</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1999), <u>Airline Quality Rating 1999</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (2000), <u>Airline Quality Rating 2000</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (2001), <u>Airline Quality Rating 2001</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (2002), <u>Airline Quality Rating 2002</u>, W. Frank Barton School of Business, Wichita, Kansas.

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Detail of Airline Performance

Since the Airline Quality Rating is comparable across airlines and across time, monthly rating results can be examined both individually and collectively. The following pages outline the AQR scores for the industry and for each airline, by month for 2001. For comparison purposes, results are also displayed for 2000. A composite industry average chart that combines the airlines tracked is shown at first, with individual airline performance charts following in alphabetical order. It should be noted that American Eagle is included in these rating for the first time, moving the number of airlines tracked from ten to eleven.

Airline Quality Rating Average AQR Scores*

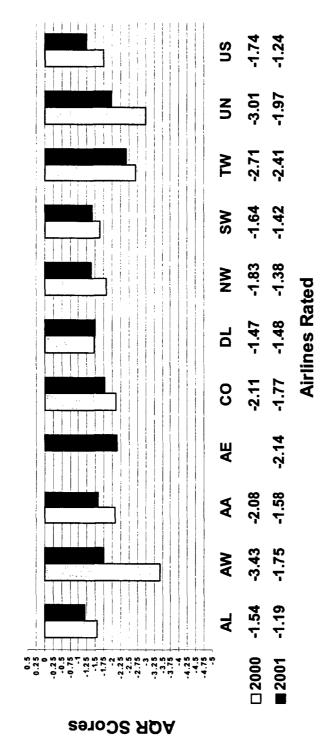
	2001**		2000		1999		1998	
	AQR Score	Rank	AQR Score	Rank	AQR Score	Rank	AQR Score	Rank
Alaska	-1.19	-	-1.54	2	-1.85	ည	-2.08	∞
America West	-1.75	7	-3.43	10	-2.12	œ	-1.54	9
American	-1.58	9	-2.08	9	-1.99	_	-1.26	က
American Eagle	-2.14	10	XXXXX	×	XXXXX	×	XXXXX	×
Continental	-1.77	8	-2.11	7	-1.58	2	-1.07	7
Delta	-1.48	5	-1.47	-	-1.69	က	-1.37	4
Northwest	-1.38	ဗ	-1.83	2	-1.72	4	-2.08	6
Southwest	-1.42	4	-1.64	က	-1.28	τ-	-1.41	2
Trans World	-2.41	11	-2.71	œ	-2.13	6	-2.08	7
United	-1.97	6	-3.01	6	-2.39	10	-2.16	10
U.S. Airways	-1.24	7	-1.74	4	-1.91	9	-0.86	_
Industry	-1.60		-2.05		-1.85		-1.61	

calendar year is used and monthly AQR scores are totaled and divided by 12 to arrive at the average AQR score for the *Average AQR scores are based on monthly AQR score calculations using the AQR weighted average method. The

^{**}Scores and Rankings for 2001 reflect the addition of American Eagle to the group of airlines tracked.

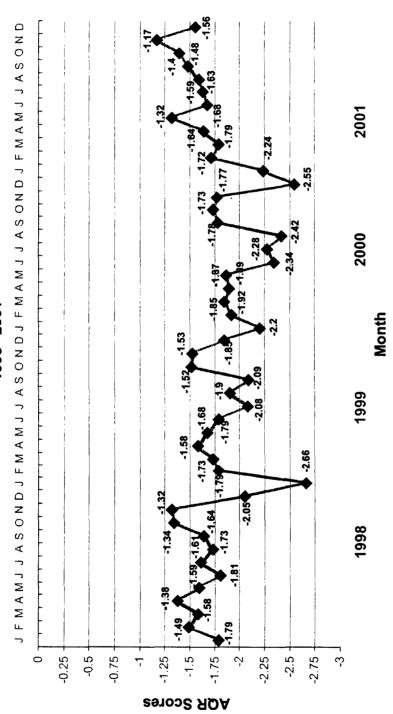
Airline Quality Rating

Average AQR Scores by Airline

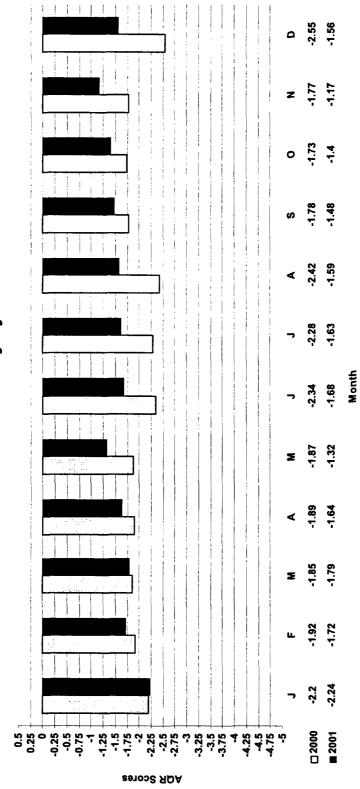


Airline Quality Rating

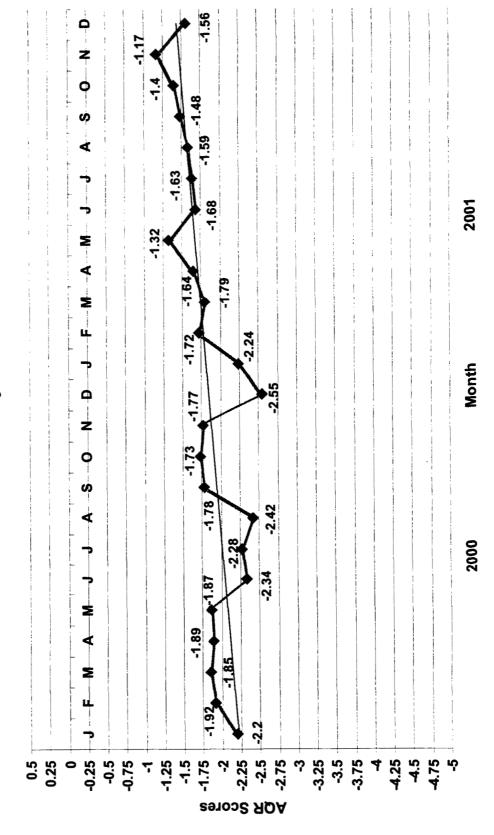




Airline Quality Rating
U.S. Airline Industry by Month

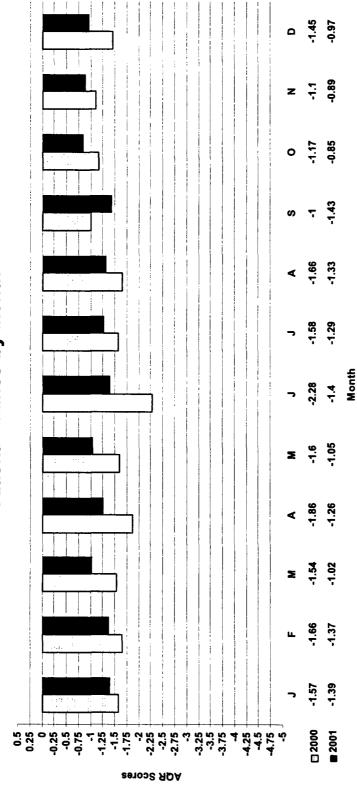


Airline Quality Rating
U.S.Airline Industry 2000 - 2001

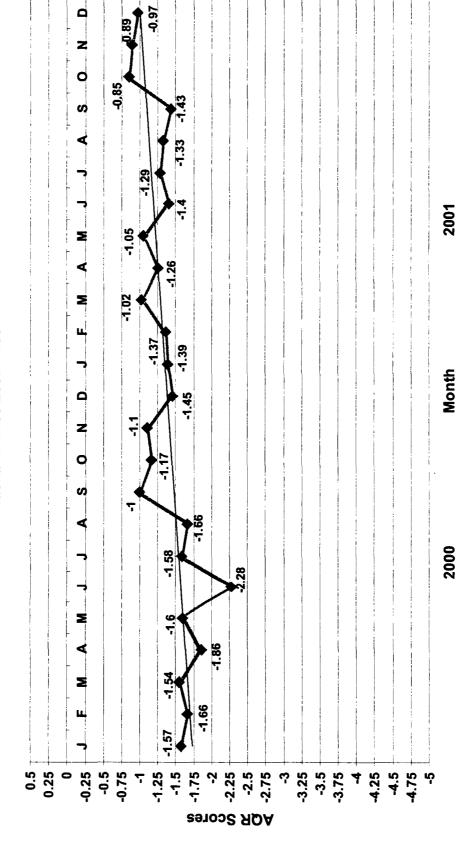


Airline Quality Rating

Alaska Airlines by Month

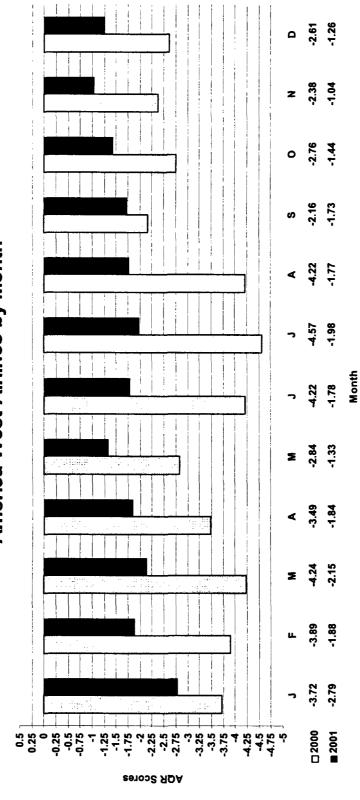


Airline Quality Rating
Alaska Airlines 2000 - 2001

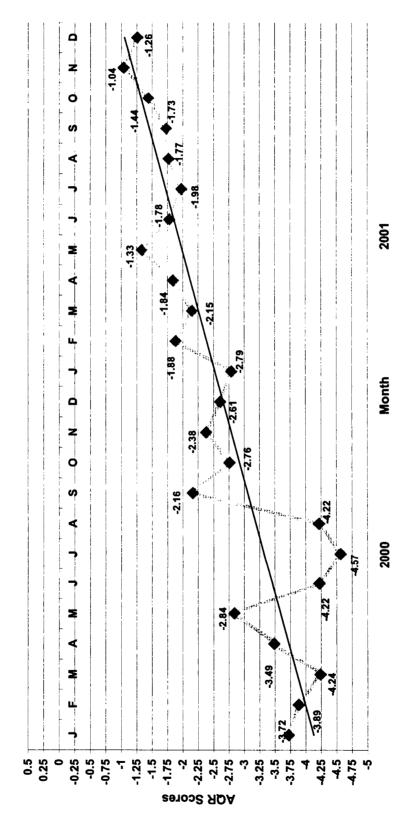


Airline Quality Rating

America West Airlines by Month

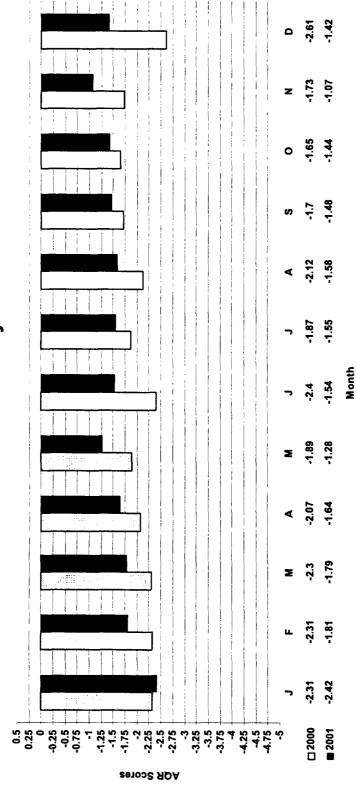


Airline Quality Rating
America West Airlines 2000 - 2001

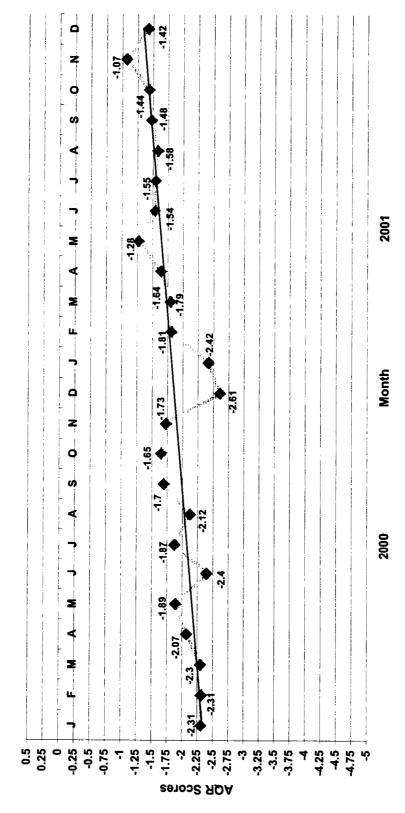


Airline Quality Rating

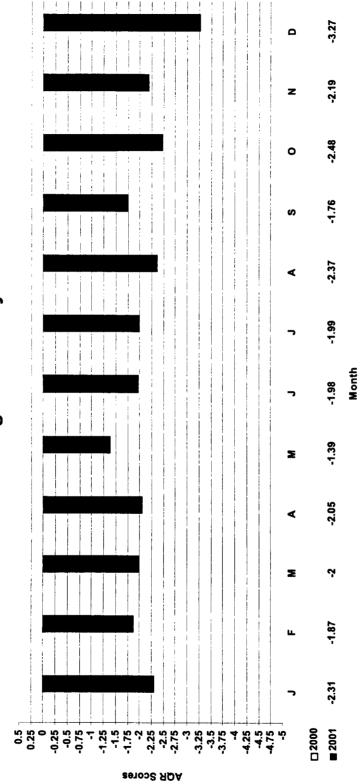
American Airlines by Month



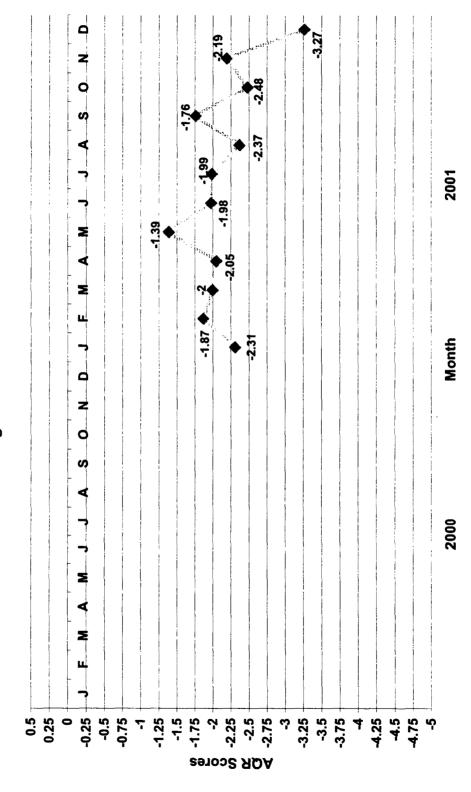
Airline Quality Rating
American Airlines 2000 - 2001



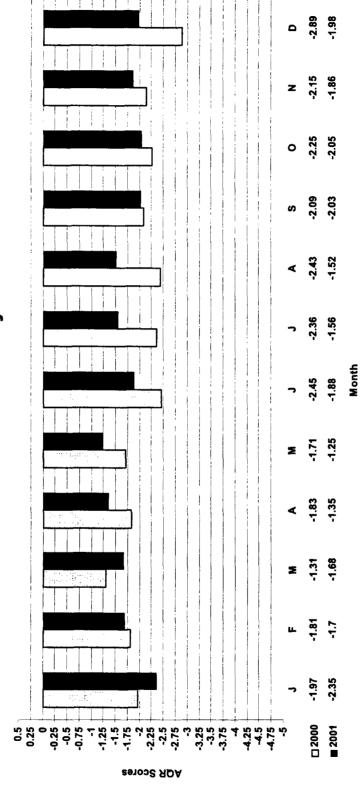
Airline Quality Rating
American Eagle Airlines by Month



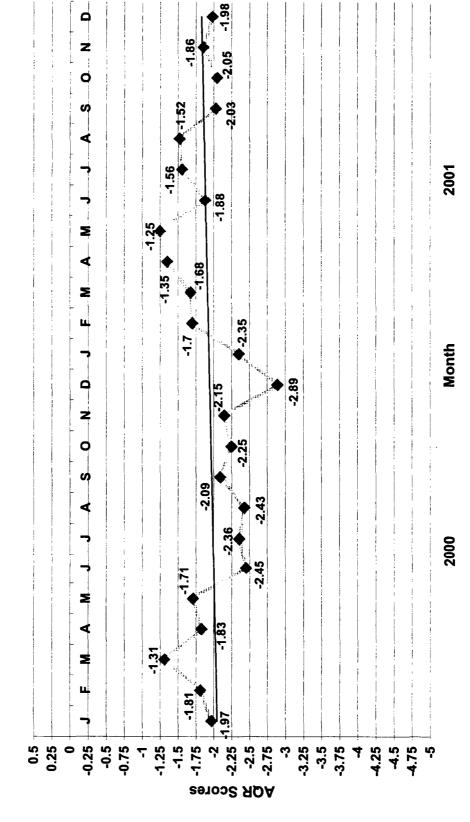
Airline Quality Rating
American Eagle Airlines 2000 - 2001



Airline Quality Rating

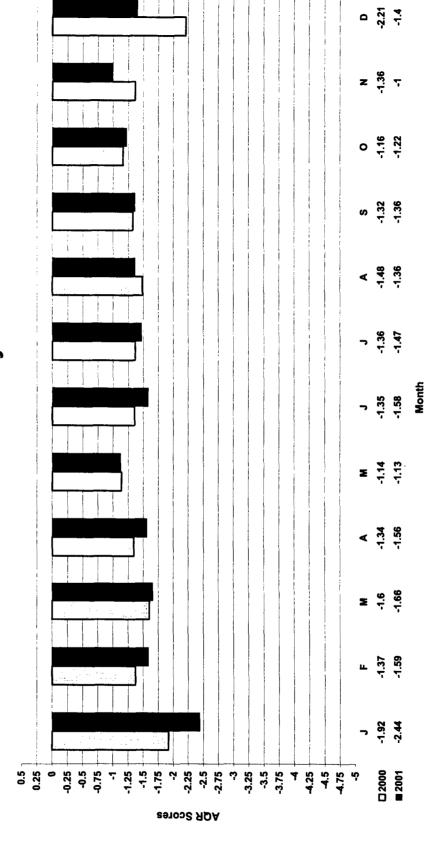


Airline Quality Rating
Continental Airlines 2000 - 2001

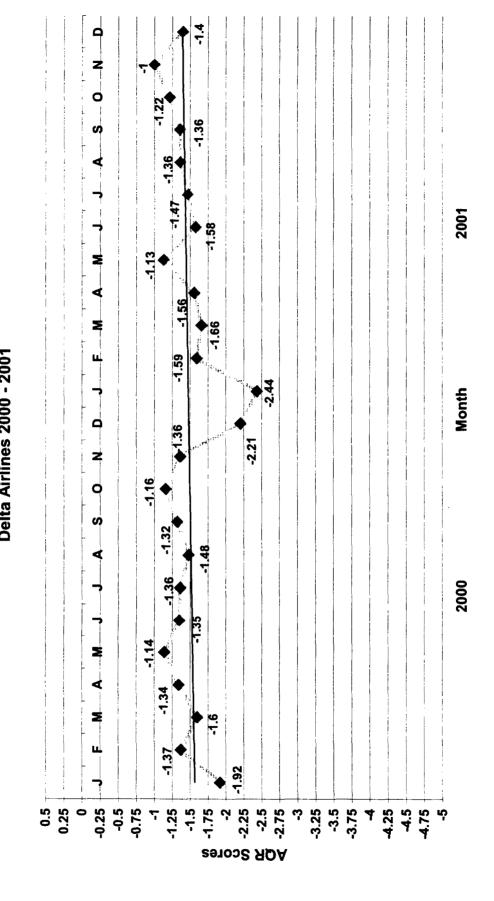


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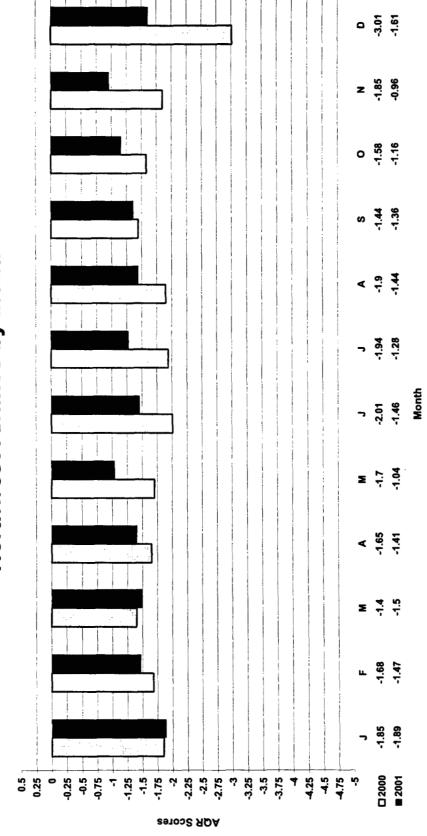


Airline Quality Rating
Delta Airlines 2000 - 2001

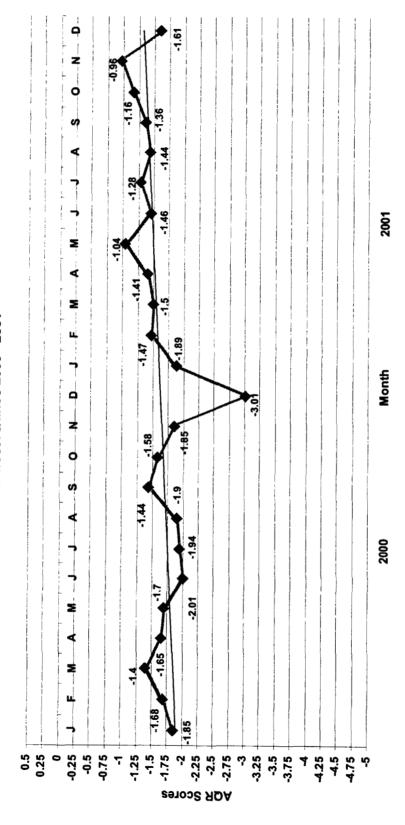


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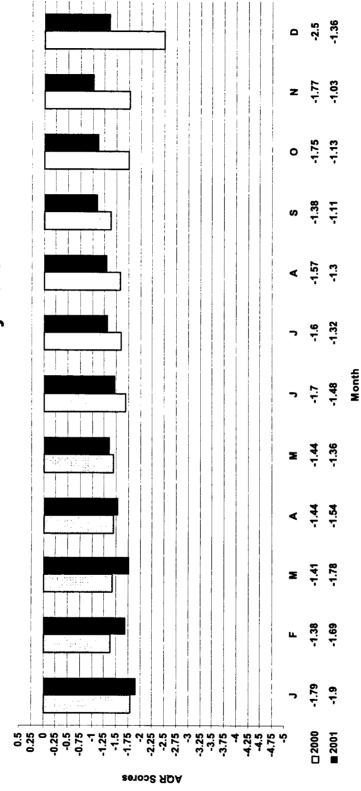
Northwest Airlines by Month



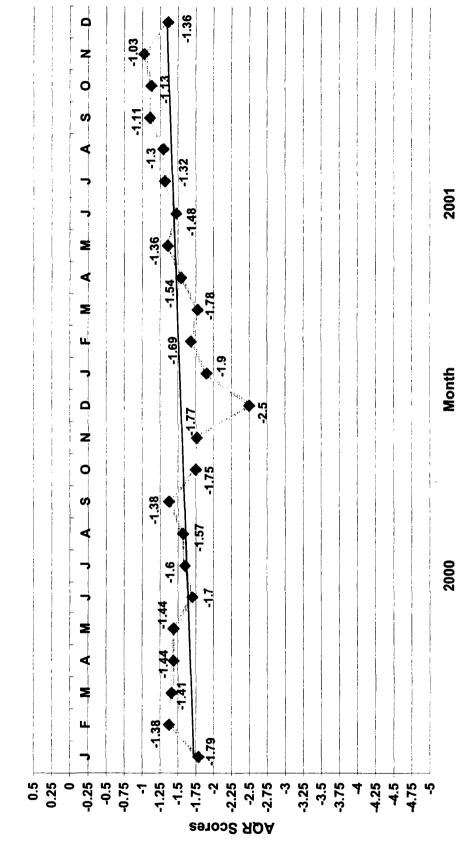
Airline Quality Rating



Airline Quality Rating Southwest Airlines by Month

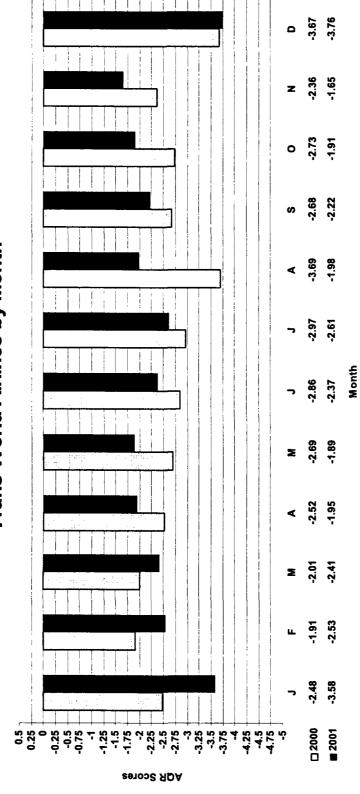


Airline Quality Rating Southwest Airlines 2000 - 2001

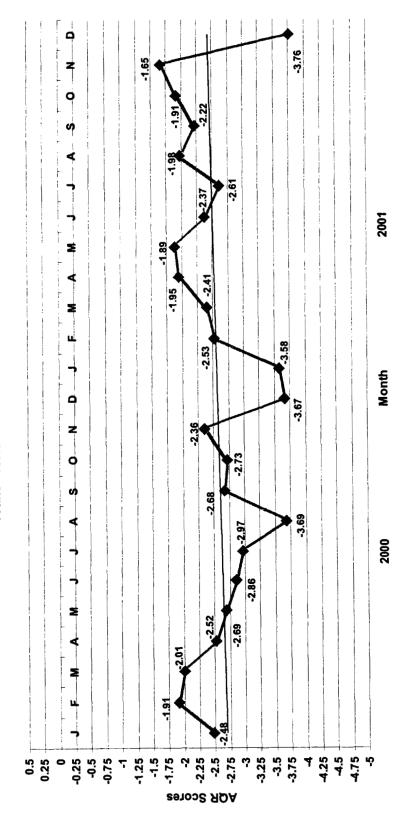


Airline Quality Rating

Trans World Airlines by Month

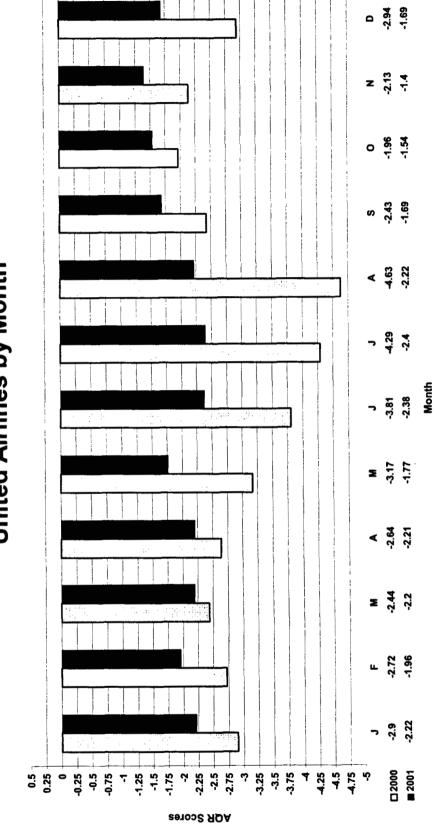


Airline Quality Rating
Trans World Airlines 2000 - 2001

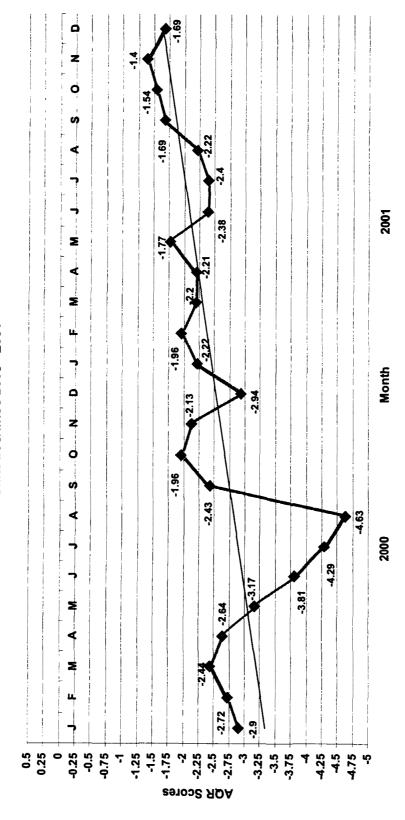


Airline Quality Rating

United Airlines by Month

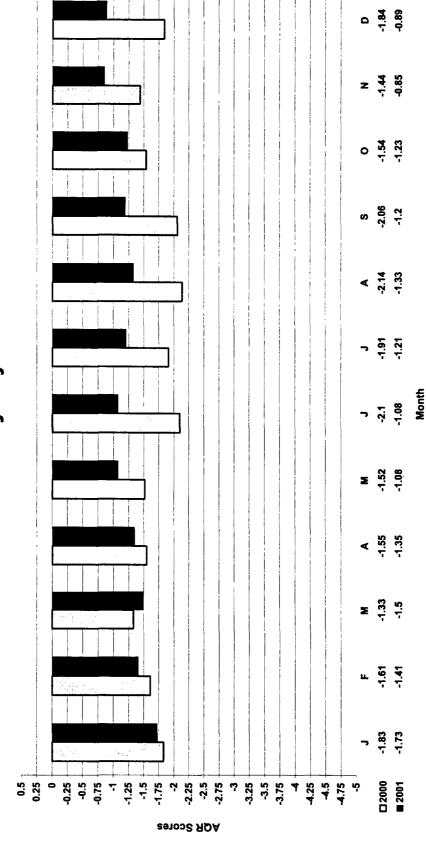


Airline Quality Rating

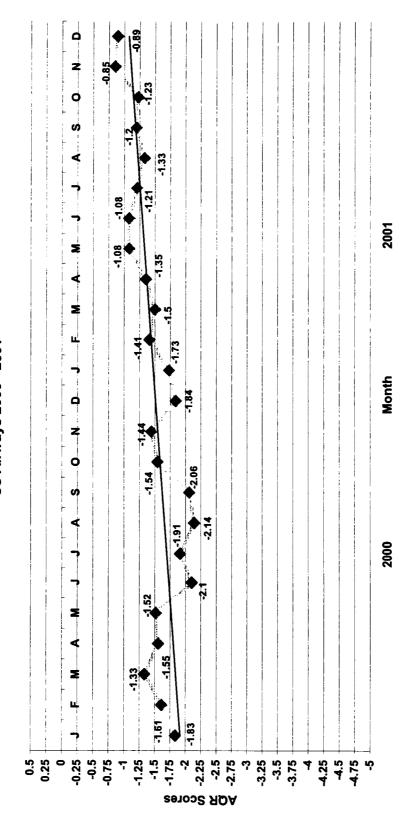


Airline Quality Rating

US Airways by Month



Airline Quality Rating
US Airways 2000 - 2001



APPENDIX

Detail of Frequently Cited Airline Performance Criteria

Consumer interest remains high regarding such issues as on-time performance, mishandled baggage, involuntary denied boardings (bumping), and treatment of customers. Since these criteria are central to the AQR calculations, it is important to provide more complete data for individual airlines in these areas. The following data tables and charts provide a detailed look at the performance of each of the 11 largest U.S. airlines for 2001 and ten U.S. airlines for 2000 regarding on-time arrivals, mishandled baggage, involuntary denied boardings, and consumer complaints. Data were drawn from the U.S. Department of Transportation monthly *Air Travel Consumer Report*.

We offer some observations in areas of concern to most consumers (on-time, mishandled bags, denied boardings, consumer complaints, and safety). This information can be useful in helping the less familiar consumer gain a perspective on issues of interest in the airline industry. Additional tables are included that give an overview of consumer complaints by type for 2001 and on-time arrival and departure information for the busiest airports.

The final pages of this appendix outline the Airline Quality Rating criteria definitions for reference and clarity in fully understanding the nature of the data reported.

2001 On-Time Arrival Percentage by Month for U.S. Airlines

	•		:	,	;	•	•	,		,	;	1	•
	Jan	Feb	Mar	Apr	May			Aug	Sep	ಕ	<u> </u>	Dec	Average
Alaska	.662	.621	.621	.710	.773	.693	907.	.647	.800	.764	.759	069	069
America West	.685	.680	269.	.735	.770	.751	.743	907.	.823	.831	.860	.866	.748
American	.761	.705	.742	.789	967.	.751	.782	.752	.780	.800	.827	.827	.759
American Eagle	.617	.635	.660	.711	.716	929.	.732	.718	.770	.832	.814	.801	.710
Continental	908	.801	.779	.857	.861	.760	.828	777.	742	887	.859	.829	.807
Delta	.731	.733	.734	.814	.833	.719	.780	.768	.844	.901	.867	.817	.780
Northwest	.810	.747	.812	908.	.840	.780	.802	807	808	.845	.856	.772	767.
Southwest	777.	.758	.798	.829	.850	.817	.835	.817	898	998.	998	.798	.817
Trans World	.769	.692	.817	.833	.852	787.	.819	.837	.862	.853	.857	.790	808
United	.762	269.	.747	.715	.779	.736	717.	.711	777.	.807	808	.779	.735
US Airways	.783	.786	.752	.829	.831	.746	.781	.741	.844	.866	.867	808	.782
Monthly Avg. 742 715 'Reflects On-Time performance for Sentember	.742	.715	.752 hru 10 20	.793	.815	.752	.781	.762	.815	.848	.847	.802	.774

*Reflects On-Time performance for September 1 thru 10, 2001 only.
Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 On-Time Arrival Percentage by Month for U.S. Airlines

	Jan	Feb	Mar	Apr	May	Jun	3	Aug	Sep	0 0 0	No No	Dec	Average
Alaska	.705	.605	.682	.708	.765	.655	.648	969.	797.	.705	.661	.570	.681
America West	.688	.627	.626	969	969	.605	.644	.595	.756	.605	675	.646	.655
American	.757	.751	.749	.750	.742	.655	.739	.739	.781	.756	.723	809.	.729
Continental	.758	.764	.807	.798	.779	.731	.801	777.	.795	.822	.800	.740	.781
Delta	.732	.793	.799	.795	807	.737	.761	.773	.781	.821	.674	.561	.753
Northwest	.772	922	.832	.812	.789	.750	.779	.792	.818	.835	.745	.582	.774
Southwest	787.	.750	.742	922	.780	.711	.785	.762	.817	.710	.751	.653	.752
Trans World	.798	.824	.811	.810	.756	999.	.744	797.	.855	777.	.815	.604	.769
United	.705	.688	.731	.656	.566	.483	.417	.427	.718	969	.691	.613	.614
US Airways	.662	.757	.811	.723	.762	.633	.705	.673	.751	.785	.741	.671	.723
Monthly Avg737 Source: Air Travel Consumer Report, U.S.	.737 er Report, U	.748 I.S. Departm	.770 . Iment of Tran	.754 ansportati	.754 .743 ansportation, Office of	.663 of Aviation	.703 1 Enforcem	.700 ent and P	.700 .781 ient and Proceedings	.751	.728	.625	.726

2001 On-Time Arrival Ranking by Month for U.S. Airlines

	1	1				!	=	V . V	*000			200	Danking
	Jan	Led			May		3	S T T	deb			מע	BUILDI
Alaska	10	10			6	10	7	7	7			7	7
America West	6	6			10	9	∞	10	2			τ-	8
American	7	9			7	2	ß	9	∞			က	7
American Eagle	17	10			7	11	თ	ω	10			9	10
Continental	2	_			_	4	7	4	7			7	က
Delta	ω	2			ນ	6	7	2	က			4	9
Northwest	←	4			4	က	4	က	9			10	4
Southwest	4	က			က	_	_	7	-			7	-
Trans World	2	∞		7	7	7	က	~	7	2	_	80	2
United	9	7			œ	ω	10	6	6			6	6
US Airways	က	7	2		9	7	9	7	4			2	2

*Rankings are based on On-Time performance for September 1 thru 10, 2001 only.
Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 On-Time Arrival Ranking by Month for U.S. Airlines

	200	Feb	Z	Apr		Jun					No No	Dec	Ranking
	5	2	5	_				•					,
Alaska	∞	10	o	∞		7					9	တ	œ
America West	σ.	6	10	0		တ					ω	4	တ
American	יני	ဖ	9	9		9					9	9	9
Continental	4	4	4	က		က					7	-	_
Delta	· (c	۰ ۸	יני	4		7					6	10	4
Northwest	o cr	1 m	-	· -		-					4	œ	2
Southwest	۰ ۵	^		5		4					က	က	S
Trans World	· -	. ~	3 2	2	7	2	2	4	-	2		7	က
United		- ∞	· œ	10		10					7	2	10
US Airways	9	Ω.	2	7		œ					ည	7	7
Source: Air Travel Consumer Report, U.S. E.	er Report.	U.S. Depal	tment of T	ransportat	.ō	of Aviation	_	~	۲	ś			

On-Time Performance for Selected* U.S. Airports January - June 2001

	JAN % On- Arr.	Time Dep.	FEB % On- Arr.	Time Dep.	MAR % On- Arr.	Time Dep.	APR % On- Arr.	Time Dep.	MAY % On- Arr.	Time Dep.	JUN % On- Arr.	Time Dep.
ATL	74.7	76.8	72.5	75.7	72.2	73.8	82.3	81.4	82.5	83.5	68.4	69.5
BWI	79.7	79.5	81.7	81.7	76.8	77.4	84.3	84.3	82.5	84.0	75.7	78.3
BOS	70.3	77.2	72.8	77.7	61.4	64.0	75.7	78.1	74.1	80.4	65.6	69.2
CLT	83.8	83.5	82.8	82.9	78.9	78.3	86.7	84.8	86.2	85.3	77.8	77.2
ORD	73.1	75.9	69.0	73.6	75.0	75.4	70.1	72.2	74.6	76.0	72.6	72.8
CVG	79.4	83.3	82.0	85.1	81.7	85.4	88.2	89.1	87.6	88.6	82.1	83.2
DFW	79.8	81.6	72.5	76.1	78.9	78.0	84.5	83.8	84.2	83.5	77.8	77.1
DEN	79.4	78.6	69.3	71.0	78.5	75.9	75.8	77.0	82.6	83.4	78.1	76.1
DTW	81.6	79.9	80.8	78.2	83.7	81.0	83.9	82.0	84.7	84.3	82.2	80.5
HOU	80.2	78.1	76.7	75.2	77.9	75.2	84.0	81.1	83.2	79.6	73.8	69.7
IAH	81.4	86.2	81.7	86.6	79.9	84.3	87.9	89.7	87.3	89.4	75.8	78.8
MCI	78.5	82.1	73.4	79.4	79.1	84.8	81.2	85.4	81.7	85.6	77.0	82.8
LAS	75.1	73.2	68.1	69.0	76.4	74.6	75.9	77.0	83.9	82.6	80.5	80.2
LAX	72.7	75.3	60.0	71.1	70.8	74.8	70.3	77.3	74.3	80.4	74.8	79.8
MEM	83.4	84.0	78.8	79.8	84.2	83.4	86.0	84.3	86.4	86.5	79.8	81.2
MIA	76.9	77.7	77.9	81.8	67.6	74.9	82.0	82.9	80.4	84.1	70.9	75.1
MSP	82.9	81.8	75.7	76.7	83.0	81.8	79.9	82.0	85.5	85.8	78.2	78.9
JFK	68.2	76.0	78.5	80.1	64.9	67.4	75.1	77.2	70.2	77.0	62.0	68.6
LGA	64.5	74.3	73.1	80.2	61.5	69.1	73.6	79.9	72.4	82.0	65.5	74.5
EWR	72.3	78.4	74.7	80.1	70.0	76.5	78.9	83.5	77.4	85.2	69.1	76.7
MCO	75.8	79.1	77.1	83.1	70.3	76.9	84.3	87.9	83.2	88.3	73.8	80.1
PHL	70.2	75.1	73.7	76.0	69.4	72.5	77.4	79.9	75.3	80.8	66.8	72.8
PHX	70.7	72.7	66.8	70.0	75.1	74.4	74.9	77.8	85.2	82.7	82.0	80.3
PIT	80.9	83.3	82.0	83.4	80.5	82.2	85.4	86.3	84.7	87.1	76.4	80.3
SLC	73.1	76.2	72.2	85.5	79.2	82.1	80.3	84.3	87.1	88.8	81.6	85.0
SAN	74.8	78.5	65.0	74.1	76.6	80.2	73.0	79.4	82.2	84.0	77.9	82.5
OAK	74.7	73.8	71.2	70.1	79.6	76.3	76.1	75.8	85.4	83.8	81.2	80.4
SFO	73.4	77.0	60.3	71.2	71.8	76.3	64.7	76.7	84.6	88.3	77.8	83.9
SJC	76.2	78.1	68.8	75.2	78.5	78.7	73.3	78.2	84.5	85.0	80.4	81.5
SEA	70.7	76.3	66.7	72.6	58.5	71.4	69.9	78.5	76.2	84.1	67.8	77.3
STL	77.6	78.8	70.3	73.2	83.1	83.3	85.3	85.0	84.4	86.4	79.5	79.8
TPA	76.5	81.4	75.8	81.4	68.9	76.2	81.8	86.2	81.9	88.2	72.3	79.5
DCA	78.9	85.7	78.0	83.8	78.4	84.0	83.3	81.5	87.6	83.9	74.5	81.0

^{*}Selected based on average number of reported operations exceeding 5000 per month (Jan – Aug).

ATL Atlanta
BWI Baltimore
BOS Boston
CLT Charlotte
ORD Chicago
CVG Cincinnati

DFW Dallas DEN Denver DTW Detroit HOU Houston IAH Houston MCI Kansas City

LAS Las Vegas LAX Los Angeles MEM Memphis MIA Miami MSP Minn./St.Paul PHX Phoenix
JFK New York PIT Pittsburgh

LGA LaGuardia EWR Newark MCO Orlando PHL Philadelphia

SLC Salt Lake City SAN San Diego OAK San Francisco SFO San Francisco SJC San Jose SEA Seattle

STL St. Louis TPA Tampa DCA Regan Nat'l

On-Time Performance for Selected* U.S. Airports July - December 2001

	JUL		AUG		SEP**		OCT		NOV		DEC	
	% On-	Time										
	Arr.	Dep.										
ATL	75.4	76.0	76.3	78.0	83.8	85.7	91.4	86.3	86.9	84.8	79.7	82.5
BWI	79.6	82.7	74.8	78.0	84.4	87.1	85.1	78.5	80.1	80.3	82.5	77.0
BOS	71.8	73.9	68.3	70.8	79.8	82.5	86.6	80.0	85.4	87.1	86.5	84.6
CLT	80.5	8.08	79.7	79.9	86.6	88.4	89.4	88.1	88.5	87.7	82.3	81.2
ORD	71.9	73.7	70.5	71.0	74.7	76.7	80.8	80.7	81.8	85.3	78.4	80.5
CVG	82.1	85.0	80.4	81.2	85.1	85.7	89.7	90.5	86.9	89.6	86.8	88.5
DFW	85.0	82.1	79.8	78.0	82.0	83.1	82.9	78.9	85.1	82.8	84.9	84.4
DEN	75.7	71.6	76.9	76.6	84.1	82.9	84.0	84.9	86.6	87.7	81.5	85.0
DTW	82.0	81.2	82.0	81.4	80.9	81.7	86.2	83.7	88.2	85.4	81.4	73.8
HOU	81.7	77.4	78.3	74.9	77.5	77.1	80.1	76.8	85.5	81.7	79.0	74.8
IAH	83.2	85.6	80.3	83.8	72.6	78.4	85.2	88.7	84.5	88.2	82.8	86.2
MCI	81.6	86.3	78.8	85.2	84.5	88.0	85.1	88.3	87.7	91.4	82.1	85.2
LAS	80.7	79.1	78.7	77.3	86.6	87.0	85.0	84.2	86.3	86.0	76.9	78.6
LAX	76.6	81.0	75.4	80.8	77.9	85.1	84.0	85.3	86.0	86.7	81.0	82.4
MEM	82.5	82.9	83.6	85.7	84.4	86.6	86.7	87.0	87.8	86.7	82.9	83.3
MIA	75.2	78.1	79.6	78.7	79.9	80.3	80.5	80.1	81.6	85.4	76.0	85.2
MSP	81.6	81.6	81.8	82.0	84.1	84.7	87.1	87.1	87.7	89.5	82.5	80.1
JFK	70.7	73.0	65.6	69.9	73.5	81.3	83.5	75.7	75.2	76.0	83.8	73.7
LGA	73.1	80.2	63.6	73.4	67.9	78.4	87.5	86.4	86.0	87.2	89.7	89.0
EWR	76.7	82.2	68.2	76.5	71.1	81.8	89.7	90.1	83.4	88.1	82.7	85.0
MCO	77.9	82.3	78.5	83.4	83.6	87.3	87.2	90.8	86.7	91.1	82.2	89.4
PHL	71.9	78.1	64.9	73.0	75.2	81.8	85.3	84.4	77.1	80.6	77.8	78.0
PHX	80.4	78.9	79.5	78.0	87.3	85.8	87.7	84.9	87.9	85.8	82.3	80.7
PIT	78.0	80.9	74.7	78.2	86.6	89.9	88.1	88.5	87.3	87.9	84.0	84.6
SLC	82.9	84.6	82.3	83.5	88.6	89.7	88.9	91.0	87.6	89.4	74.2	79.7
SAN	79.2	83.5	76.4	82.0	84.9	89.9	81.6	82.9	81.6	84.2	78.4	81.5
OAK	82.1	79.9	78.1	78.2	86.3	87.8	84.6	83.0	81.1	76.8	70.5	67.4
SFO	68.7	77.9	70.8	79.4	83.0	87.4	75.0	81.1	79.6	84.4	64.6	76.9
SJC	79.8	81.7	78.1	81.0	85.7	87.3	85.6	84.1	82.5	83.6	75.2	77.3
SEA	71.3	78.4	65.6	72.8	82.9	86.6	71.0	81.8	78.1	82.4	69.8	77.0
STL	81.8	82.4	84.4	84.2	85.5	87.6	85.5	85.5	88.7	88.1	80.0	78.9
TPA	77.7	83.2	77.1	83.8	82.3	85.1	85.9	89.2	86.2	90.2	79.9	84.8
DCA	80.4	85.9	76.3	82.6	83.9	89.9	79.0	79.1	85.7	90.4	86.9	90.0

^{*}Selected based on average number of reported operations exceeding 5000 per month (Jan - Aug).

^{**}September data only includes operations for Sept. 1 thru Sept. 10, 2001.

ATL Atlanta
BWI Baltimore
BOS Boston
CLT Charlotte
ORD Chicago
CVG Cincinnati

DFW Dallas DEN Denver DTW Detroit HOU Houston IAH Houston MCI Kansas City

LAS Las Vegas LAX Los Angeles MEM Memphis MIA Miami MSP Minn./St.Paul PHX Phoenix JFK New York

LGA LaGuardia EWR Newark MCO Orlando PHL Philadelphia PIT Pittsburgh

SLC Salt Lake City SAN San Diego OAK San Francisco DCA Regan Nat'l SFO San Francisco SJC San Jose **SEA Seattle**

STL St. Louis TPA Tampa

2001 Involuntary Denied Boardings by Quarter for U.S. Airlines (per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual
Alaska	1.50	1.62	1.31*	0.96	1.36*
America West	0.49	0.46	0.21*	0.35	0.38*
American	0.38	0.30	0.37*	0.40	0.36*
American Eagle	0.02	0.60	0.90*	0.13	0.43*
Continental	1.30	0.77	0.56*	3.77	1.51*
Delta	0.41	0.87	0.65*	1.20	0.77*
Northwest	0.52	0.45	0.25*	0.63	0.45*
Southwest	1.57	1.86	1.45*	1.07	1.50*
Trans World	2.58	1.78	1.70*	1.07	1.83*
United	0.82	1.31	0.85*	0.61	0.92*
US Airways	0.52	0.26	0.17*	0.46	0.34*
Industry Average	0.84	0.91	0.70*	1.01	0.86*

^{*3}rd Quarter and Annual Denied Boarding rates reflect performance data for September 1 thru 10, 2001 as part of the rates.

Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 Involuntary Denied Boardings by Quarter for U.S. Airlines (per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual
Alaska	1.47	1.83	1.32	1.03	1.41
America West	1.79	1.36	0.71	0.68	1.12
American	0.59	0.43	0.31	0.35	0.42
Continental	0.89	1.52	1.87	2.91	1.80
Delta	0.44	0.35	0.25	0.27	0.33
Northwest	0.12	0.72	0.42	1.00	0.57
Southwest	1.70	2.10	1.71	2.04	1.89
Trans World	1.82	3.43	3.86	1.83	2.54
United	1.61	1.99	1.30	0.77	1.43
US Airways	0.80	0.86	0.37	0.66	0.65
Industry Average	0.98	1.28	0.97	1.01	1.04

Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2001 Mishandled Baggage by Month for U.S. Airlines (Per 1,000 passenders)

					שׁ ב	5	שממשל	(S 12)					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		oct O	No.	Dec	Annual
Alaska	3.22	2.74	1.91	2.78	2.72	3.28	3.28	3.44		2.57	2.80	3.40	3.00
America West	5.88	4.89	5.17	3.82	3.28	4.01	4.17	4.15		3.53	3.29	4.19	4.22
American	5.80	4.99	4.86	3.99	3.52	4.54	4.48	4.55	_	4.92	3.96	5.34	4.60
American Eagle	7.78	6.22	6.88	5.77	4.80	6.37	6.12	69.9		10.50	9.24	13.44	7.36
Continental	5.50	4.41	4.51	3.78	3.71	4.56	4.31	4.31 4.38	5.06	3.61	3.56	4.47	4.29
Delta	6.03	4.64	4.68	4.22	3.35	4.32	3.87	3.61		3.19	3.05	4.36	4.11
Northwest	5.32	4.66	4.11	3.84	3.28	4.41	4.16	4.15		3.30	3.46	5.74	4.19
Southwest	6.15	5.61	5.93	4.92	4.26	4.58	4.55	4.24		4.05	3.84	4.94	4.77
Trans World	7.90	6.17	5.50	4.70	4.77	6.07	6.23	5.67		6.17	5.73	14.42	6.35
United	5.37	5.22	5.29	4.74	4.28	5.29	5.74	5.31		4.81	4.40	5.55	5.07
US Airways	4.92	4.37	4.32	4.18	3.83	3.33	3.44	3.88		4.02	3.25	3.06	3.86
Monthly Avg.	5.71	4.91	4.90	4.30	3.79	4.53	4.48	4.38	3.89	4.19	3.82	5.29	4.55

Monthly Avg. 5.71 4.91 4.90 4.30 3.79 4.53 4.48 4.38 3.89 4.19 3.82 *Reflects Mishandled Baggage performance for September 1 thru 10, 2001 only.

Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 Mishandled Baggage by Month for U.S. Airlines

					be (be	. 1,000	passer	gers)					
	Jan		Mar		May	Jun	שר	Aug	Sep	Oct	Nov	Dec	Annual
Alaska	3.76		3.32		3.15	4.15	4.25	3.70	2.63	2.30	3.02	4.75	3.48
America West	6.26		7.65		5.78	7.93	8.59	8.16	4.66	6.04	5.56	6.46	6.62
American	5.23	5.18	5.63		5.44	5.97	5.47	5.16	4.37	4.59	5.20	8.76	5.50
Continental	5.87	5.31	4.82		4.80	5.97	5.70	5.64	4.72	4.73	5.07	7.53	5.35
Delta	5.65	4.08	5.04		3.64	4.00	4.38	3.96	4.06	3.64	4.62	7.61	4.49
Northwest	5.23	4.81	4.26		4.98	5.62	5.57	5.08	4.33	4.12	4.96	10.00	5.24
Southwest	4.60	4.13	4.20		4.14	5.03	5.06	4.94	4.35	5.44	5.54	8.41	5.00
Trans World	6.09	4.74	5.24		5.23	6.10	6.16	7.15	5.27	00.9	5.61	10.93	90.9
United	7.14	6.72	6.51		6.71	7.60	7.89	7.18	4.65	4.53	5.11	8.71	6.57
US Airways	4.48	4.31	3.93	4.29	4.57	5.51	4.98 4.99	4.99	5.83	4.13	4.19	5.81	4.76
Monthly Avg.	5.54	71 (5.09	5.09 4.50	4.85	5.65	5.64	5.35	4.55	4.51	4.96	8.07	5.29
Source: Air Travel Consumer Report, U.	я кероп, О	.s. Departmen	tment of I	ransportat	ion, Omice o	or Aviatio	neorona r		Ceeding	ń			

2001 Mishandled Baggage Rankings by Month for U.S. Airlines

	20	H C	Z Z	Apr	Ma _v	Jun	Jul	Aug	Sep*	oct O	No.	Dec	Ranking
Alacka	5		~	-	7	-	-	, —	. Θ	~	-	7	τ-
Alaska America Woot	- 1	- œ	- 1	٠,	· (*)	m	2	5	2	4	4	က	2
America west	- ଏ	7 (- «	י ער	י ער	(_	· ∞	œ	6	∞	7	7
American American Eagle	5 0	7	. 5	, =	, +	, 7	10	11	1	1	11	10	17
American Eagle		- « -	7		: (9		10	2	9	2	9
Continental	οα	٥ 4	ן ער	7 /	4	. 4	က	. ~	4	7	7	4	င
Northwoot	۳ د	ן ער	۰ ۵	- 4	۰ ۸	. rc	4	4	2	က	2	6	4
Southwest	o 0	ာ	10	10	ι ∞	∞	ω	9	က	7	7	9	œ
Trans World	7	9	<u></u> ത	. ∞	10	10	7	10	O	10	10	1	10
United	4	, α	∞	6	ത	6	6	6	7	ω	თ	ω	თ
US Airways	7	7	က	9	7	2	7	က	-	9	က	-	7

^{*}Rankings are based on Mishandled Baggage performance for September 1 thru 10, 2001 only. Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 Mishandled Baggage Rankings by Month for U.S. Airlines

	Ton Hoh	H C	7	Anr		Jun	-	Aug	Sep	ö	No V	Dec	Ranking
A 115	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	5 ~	-	•	•	œ		, -	<u>_</u>	-	-	_	_
Alaska	- (- (- ;	- (, ?			_	4	σ	٣	40
America West	တ	ဘ	2	ກ		2		2	_	2	ו כ	י כ	2 1
American	4	œ	œ	∞		2		ဖ	2	9	7	∞	_
Continontal		ט נ	0	(1)		7		7	∞	7	2	4	9
Continental	1 1) C	1 (0		· 		2	7	7	7	2	2
Delta	- 4	1 1	ט ע	1 ע	ו עב	٠ 4	ı c	ı rc	က	က	4	6	S
Northwest) (۰ ،	> <	> <				· (*)	4	· œ	ω	9	4
Southwest	0 (o († †	† 1		1 (1		α	۰ ه	σ	, 0	10	œ
Trans World	œ	٥	•	•		0		Э (י מ	וכ	2 (1 2	
United	10	10	တ	9		ი		တ	တ	ဂ	٥	•	n (
US Airways	က	4	က	9		က		4	10	4	7	7	m
Source: Air Travel Consumer Report, U.S. D	er Report, L	J.S. Depa	rtment of 1	ransportal	<u>5</u>	of Aviatio	n Enforce	nent and F	Proceeding	<u>.</u>			

2001 Total Complaints to Department of Transportation by Month for U.S. Airlines (Per 100.000 passengers)

					Į L		טממט ס	かいろこう					
	Jan	Feb	Mar	Apr	May	Jun	Ju	Aug	Sep	Oct*	Xov*	Dec*	Annual
Alaska	1.72	2.11	1.48	1.53	0.75	1.59	1.46	1.40	1.74	92.0	0.68	0.28	1.27
America West	6.15	3.19	4.10	4.28	2.69	3.84	4.83	3.85	4.49	3.08	1.63	1.61	3.72
American	4.80	2.92	3.02	3.47	2.39	2.38	2.46	2.44	2.41	1.44	0.91	0.92	2.51
American Eagle	2.37	2.17	2.03	2.87	1.05	1.87	1.91	2.98	1.51	0.22	0.33	0.45	1.70
Continental	3.84	2.15	1.92	1.96	1.63	3.34	2.50	2.21	3.66	1.93	1.12	0.59	2.23
Delta	4.58	2.32	2.62	2.26	1.33	2.13	2.44	2.25	2.27	1.61	92.0	1.01	2.16
Northwest	2.87	1.66	2.48	2.46	1.47	2.03	1.76	2.36	2.63	1.80	0.77	1.03	1.97
Southwest	0.78	0.45	0.52	0.28	0.26	0.38	0.22	0.44	0.38	0.37	0.18	0.34	0.38
Trans World	5.15	2.32	2.69	2.46	2.14	2.76	3.67	1.63	3.86	1.45	0.83	0.48	2.54
United	3.89	2.82	3.87	3.96	2.57	4.13	4.19	3.89	3.14	1.79	1.61	1.60	3.24
US Airways	2.58	1.76	2.19	2.08	1.27	1.72	2.29	2.31	2.60	1.52	0.72	1.04	1.87
Monthly Ava.	3.58	2.11	2.48	2.46	1.60	2.33	2.41	2.32	2.44	1.45	0.86	0.92	2.11

Monthly Avg. 5.36 Z.11 Z.46 Z.40 1.00 Z.33 Z.41 Z.3Z Z.44 1.43 U.O. U.O. U.O. U.O. U.O. O.O. Z.44 1.45 U.O. U.O. U.O. U.O. O.O. Z.44 1.45 U.O. U.O. O.O. O.O. O.O. O.O. O.O. O.O. O.O. U.O. O.O. U.O. Department of Transportation, Office of Aviation Enforcement and Proceedings.

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Ö		9	00 Tota	00 Total C	00 Total Con	00 Total Compl	00 Total Complair	00 Total Complaints	00 Total Complaints to	00 Total Complaints to De	00 Total Complaints to Depar	00 Total Complaints to Departm	00 Total Complaints to Departmer	00 Total Complaints to Department c	00 Total Complaints to Department of T	00 Total Complaints to Department of Tran (per 100 000 pas	00 Total Complaints to Department of Transp (ner 100 000 passe	00 Total Complaints to Department of Transport	00 Total Complaints to Department of Transportati	00 Total Complaints to Department of Transportation (net 100 000 passenders)	00 Total Complaints to Department of Transportation by (ner 100 000 passenders)	00 Total Complaints to Department of Transportation by Mc	00 Total Complaints to Department of Transportation by Montl (ner 100 000 passengers)	00 Total Complaints to Department of Transportation by Month fo	00 Total Complaints to Department of Transportation by Month for U	00 Total Complaints to Department of Transportation by Month for U.S. (per 100 000 passenders)	00 Total Complaints to Department of Transportation by Month for U.S. Ali (ner 100 000 passengers)	00 Total Complaints to Department of Transportation by Month for U.S. Airlir	00 Total Complaints to Department of Transportation by Month for U.S. Airlines (ner 100 000 passengers)	\equiv	

					(ber	5,5	U passe	ziigeis/	_				
	Jan	Feb	Mar	Apr	May	Jun	Ju	Aug		Oct	Nov	Dec	Annual
Alaska	2.00	2.47	2.33	4.00	2.48	1.75	1.62	2.63		2.34	1.19	69.0	2.04
America West	8.38	9.74	9.07	8.37	5.51	9.15	10.75	9.59		5.50	4.44	4.42	7.51
American	4.70	4.74	4.22	4.06	2.77	4.33	2.76	4.24		2.76	2.38	2.18	3.54
Continental	4.37	3.59	2.37	2.99	2.25	3.16	3.04	3.38		2.49	1.62	2.13	2.84
Delta	2.64	2.00	1.99	2.30	1.60	2.07	1.80	2.83		1.78	1.41	1.74	2.01
Northwest	3.23	2.94	2.36	2.78	2.17	2.78	2.92	3.30		2.35	2.49	1.85	2.61
Southwest	0.77	0.56	0.58	0.51	0.41	0.48	0.53	0.49		0.30	0.35	0.27	0.47
Trans World	4.38	3.38	3.29	3.55	3.47	3.14	2.73	4.85		4.34	3.20	2.86	3.47
United	4.02	3.64	2.71	3.75	5.07	6.84	9.34	11.61		3.66	3.74	3.27	5.30
US Airways	3.05	2.37	1.65	2.01	1.63	3.00	3.00 3.40 4.34	4.34	3.16	2.55	1.95	1.85	2.59
Monthly Avg. 3.46 Source: Air Travel Consumer Report, U.S.	3.46 er Report, 1	3.08 J.S. Depar	2.61 tment of T	2.93	2.49 Jon, Office	3.47 of Aviation	3.62 Enforce	4.56 nent and P	4.56 2.72 ment and Proceeding	2.46	2.11	2.01	2.98

2001 Total Complaints to Department of Transportation Rankings by Month for U.S. Airlines

	Jan	Feb	Mar	Apr	May	Jun	Ju	Aug	Sep	* 0 0	Nov*	Dec*	Ranking
Alaska	7	4	7	.7	,0	7	7	,7	. ო	က	က	_	2
America West	11	7	11	11	11	10	17	10	11	11	7	7	7
American	တ	10	တ	6	တ	7	7	∞	2	4	∞	9	œ
American Eagle	က	9	4	ω	က	4	4	တ	7	_	7	က	က
Continental	9	5	က	က	7	6	ω	4	6	10	တ	2	7
Delta	∞	ω	7	2	2	9	9	2	4	7	2	7	9
Northwest	2	7	9	7	9	2	က	7	7	6	9	ω	2
Southwest	-	_	-	_	-	-	_	_	_	7	-	7	_
Trans World	10	7	∞	9	∞	∞	တ	က	10	2	7	4	6
United	7	တ	10	10	10	7	10	7	ω	ω	10	10	10
US Airways	4	က	2	4	4	က	5	9	9	9	4	တ	4

^{*}During this month, U.S. Government offices in the Washington, D.C. area experienced mail delivery problems, which may have affected complaint totals and rankings. Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

2000 Total Complaints to Department of Transportation by Month for U.S. Airlines Rankings

	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sep	Oct	No No	Dec	Ranking
Alaska	7	4	4	∞	0	7	7	7	- 7	က	7	7	က
America West	10	10	10	10	10	10	10	6	6	10	10	10	10
American	თ	6	တ	6	7	ω	2	9	ω	7	9	7	ω
Continental	7	7	9	2	2	7	7	2	9	2	4	9	9
Delta	က	7	က	က	7	က	က	က	က	7	က	က	2
Northwest	2	2	2	4	4	4	9	4	4	4	7	2	2
Southwest	_	_	-	_	-	-	_	_	_	_	-	_	_
Trans World	∞	9	∞	9	ω	9	4	ω	2	6	∞	∞	7
United	9	ω	7	7	တ	6	တ	10	10	∞	တ	တ	တ
US Airways	7	က	7	7	က	ß	∞	7	7	9	5	4	4
Source: Air Travel Consumer Report, U.S. D.	er Report, L	J.S. Depar	tment of Tr	ansportati	on, Office	of Aviation	ı Enforcen	ent and P	roceedings				

Overview of Complaints Received by Department of Transportation 2000 and 2001¹

							Top	Four C	Top Four Categories	ies⁴
	Complaints For All Airli	Complaints For All Airlines ²	Comp	Somplaints or IIS Airlines	Complaints for 11 Airline	laints Airlines³	o Č	omplai Airline	of Complaints to All	₹_
	2000	2001	2000	2000 2001	2000	2001	; -	2) ()	4
Jan	2034	2221	1777	1972	1394	1525	БР	SS	BG	1 B
Feb	1992	1248	1693	1086	1292	872	FP	CS	BG	TB
Mar	1924	1757	1663	1529	1325	1265	БF	CS	BG	18
Apr	2099	1667	1826	1498	1421	1211	НР	SS	BG	TB
May	1729	1158	1544	286	1239	762	F	SS	BG	TB
Jun	2393	1721	2147	1470	1807	1214	단	SS	BG	18
Jul	2445	1927	2243	1618	1931	1310	g.	SS	BG	TB
Aug	2911	1880	2659	1615	2380	1262	FР	CS	BG	18
Sep	1587	1043	1410	865	1211	726	ਜ	R F	SS	ВС/ТВ
Oct	1605	825 ⁵	1395	633 ⁵	1186	550 ⁵	RF	ፁ	SS	TB
Nov	1390	516 ⁵	1187	374 ⁵	286	328 ⁵	R	SS	T	BG
Dec	1287	558 ⁵	1077	433 ⁵	897	355 ⁵	CS	단	BG	RF
	23396	16521	20621	14080	17070	11415	윤	S	BG	18

9.3 19.2 Percent (%) of All Complaints for U.S. Carriers in these Categories for 2001 35.8

¹ Totals for 2000 reflect 10 airlines' experience; totals for 2001 reflect 11 airlines' experience.

² Total number includes complaints for all U.S. airlines + foreign airlines + travel agents + tour operators + miscellaneous sources.

³ In 2001 American Eagle was the 11th airline added to the previous group of 10 airlines that have at least one percent of domestic scheduled-service passenger revenues.

⁴ FP = Flight Problems; CS = Customer Service; BG = Baggage; TB = Reservations, Ticketing, and Boarding; RF = Refunds. Details of categories and definitions are in

⁵ During this month, U.S. Government offices in the Washington, D.C. area experienced mail delivery problems, which may have affected the complaint totals.

Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

Some Interesting Facts About U.S. Airlines

Approximately 488 million people boarded one of the 11 largest U.S. carriers to fly somewhere inside the U.S. in 2001 (down from 517 million in 2000). This does not consider those travelers that boarded a flight in the U.S. and went to an international destination. Regional and commuter carriers accounted for an additional estimated 83 million passengers flying domestic routes as well (down from 85 million in 2000). This totals to an estimated 571 million people flying to destinations within the U.S. in 2001(down from 602 million in 2000). With the economic down-turn in the first months of 2001 and the 9/11/01 terrorist attacks. passenger volumes dropped. As the economy recovers and the flying public returns to air travel, growth and a return to previous volumes are predicted. The FAA forecast for growth in domestic passenger enplanements is predicted to have a slow period for another year. It is anticipated that passenger enplanements will again reach the 4% per year growth level in 2003 and that domestic enplanements could reach 1 billion passengers by 2013.

Mishandled Baggage: Your chance of having a bag mishandled or lost depends on how you use the

misha	nge system, but less than one out of every 200 checked bags are reported indied. Most bags are returned to the traveler within 48 hours. Only a very few impletely lost and never returned.
	The eleven largest U.S. airlines averaged 4.55 mishandled bags per 1,000 passengers in 2001, a decrease over the 2000 rate of 5.29.
	Worst months for baggage handling were January (5.71) and December (5.29)
	Fewest bags were reported mishandled in May (3.79), and November (3.82).
	Airline that mishandled bags most often was American Eagle (7.36).
	Airline that mishandled bags least often was Alaska Airlines (3.00).
On-Ti	me Arrival:
	On time arrivale are affected by many uncentrallable factors. When just the

On-time arrivals are affected by many uncontrollable factors. When just the more controllable elements are considered, the eleven largest U.S. carriers maintained a 77.4% on-time arrival record for 2001. This was better than the 72.6.1% on-time arrival record for the industry in 2000.

- (i)Worst on-time arrival performer for 2001; Alaska (69.0%).
- (\mathbf{r}) Best on-time arrival performer for 2001: Southwest (81.7%).
- (7)The most troublesome months to fly in 2001 (lowest on-time arrival performance for the industry) were February (71.5%) and January (74.2%).
- (r)The most successful on-time arrival months for the industry in 2001 were October (84.8%), November (84.7%), and May (81.5%).

Being Bumped From a Flight (Involuntary Denied Boardings):

Across the industry, 0.86 passengers per 10,000 boardings were bumped from their flight involuntarily in 2001. This is a 17% improvement in the industry rate of 1.04 denied boardings per 10,000 passengers in 2000.

- The airline most likely to bump a passenger in 2001: Trans World (1.83).
- The airline least likely to bump a passenger in 2001: US Airways (0.34).
- The fourth quarter of 2001 (October December) was the worst at 1.01.
- The third quarter of 2001 (July September) was the best at 0.70.

Consumer Complaints:

On average, the Department of Transportation received 2.11 consumer complaints per 100,000 passengers for the eleven largest carriers in 2001. The volume of complaints in 2001 represents a 29% decrease in the rate of complaints over the 2000 rate. These complaints represent a wide range of areas, such as cancellations, delays, oversales, reservation and ticketing problems, fares, refunds, customer treatment, unfair advertising, and other general problems.

- Airline with the highest complaint rate: America West (3.72).
- Airline with the lowest complaint rate: Southwest (0.38).
- January was the month with the highest complaint rate (3.58).
- November (0.86) had the lowest monthly rate for the eleven largest carriers. This lower rate is partly attributable to the lack of mail deliveries in the Washington D.C. area during this month.

Airline Safety:

If the deaths (265 on airplanes and those on the ground) involving the four airplanes used in the terrorist attacks of 9/11/01 are not considered, there were 265 deaths associated with 23 airline accidents in 2001. These 265 deaths are a direct result of the 11/12/01 crash in Belle Harbor, New York. In 2000, there were 88 passenger deaths for the ten largest (Part 121 scheduled) airlines. These 10 airlines experienced 49 accidents in 2000, compared to 35 accidents (and 228 deaths) in 1999. Also, one flight attendant was killed in 2000 during an emergency deplanement. National and Regional carriers (Part 135 scheduled) registered 14 fatalities in 2001 with 19 accidents being reported, compared to 5 fatalities and 12 accidents reported in 2000.

General aviation accident numbers were lower in 2001 (1,323) than in 2000 (1,835). With the lower overall number of accidents, fatalities were also lower in 2001 (323) than in 2000 (592). In 2001, about 1 in 4 (313 of the 1,323) general aviation accidents involved a fatality.

Airline Quality Rating Criteria Overview

The individual criteria used to calculate the AQR scores are summed up in four basic areas that reflect customer-oriented areas of airline performance. Definitions of the four areas used in this AQR 2002 (2001 data) are outlined below.

OT ON-TIME PERFORMANCE (+8.63)

Regularly published data regarding on-time arrival performance is obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. According to the DOT, a flight is counted "on time" if it is operated within 15 minutes of the scheduled time shown in the carriers' Computerized Reservations Systems. Delays caused by mechanical problems are counted as of January 1, 1995. Canceled and diverted operations are counted as late. The AQR calculations use the percentage of flights arriving on time for each airline for each month.

DB INVOLUNTARY DENIED BOARDINGS (-8.03)

This criterion includes involuntary denied boardings. Data regarding denied boardings could be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. Data includes the number of passengers who hold confirmed reservations and are involuntarily denied boarding on a flight that is oversold. These figures include only passengers whose oversold flight departs without them onboard. The AQR uses the ratio of involuntary denied boardings per 10,000 passengers boarded by month.

MB MISHANDLED BAGGAGE REPORTS (-7.92)

Regularly published data regarding consumer reports to the carriers of mishandled baggage can be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. According to the DOT, a mishandled bag includes claims for lost, damaged, delayed, or pilfered baggage. Data is reported by carriers as to the rate of mishandled baggage reports per 1,000 passengers and for the industry. The AQR ratio is based on the total number of reports each carrier received from passengers concerning lost, damaged, delayed, or pilfered baggage per 1,000 passengers served.

CC CONSUMER COMPLAINTS (-7.17)

The criteria of consumer complaints is made up of 12 specific complaint categories (outlined below) monitored by the U. S. Department of Transportation and reported monthly in the *Air Travel Consumer Report*. Consumers can file complaints with the DOT in writing, by telephone, via e-mail, or in person. The AQR uses complaints about the various categories as part of the larger customer complaint criteria and calculates the consumer complaint ratio on the number of complaints received per 100,000 passengers flown.

CONSUMER COMPLAINT CATEGORIES

Flight Problems

Data is available by the total number of consumer complaints pertaining to cancellations, delays, or any other deviations from schedule, whether planned or unplanned for each airline each month.

Oversales

This complaint category includes all bumping problems, whether or not the airline complied with DOT oversale regulations. Data is available by the total number of consumer complaints pertaining to oversales for each airline each month.

Reservations, Ticketing, and Boarding

This category includes airline or travel agent mistakes in reservations and ticketing, problems in making reservations and obtaining tickets due to busy telephone lines, or waiting in line or delays in mailing tickets, and problems boarding the aircraft (except oversales). Data is available by the total number of consumer complaints pertaining to ticketing and boarding for each airline each month.

Fares

As defined by the DOT, consumer complaints about fares include incorrect or incomplete information about fares, discount fare conditions and availability, overcharges, fare increases, and level of fares in general. Data is available for the total number of consumer complaints pertaining to fares for each airline each month.

Refunds

This category includes customer complaints about problems in obtaining refunds for unused or lost tickets, fare adjustments, or bankruptcies. Data is available by the total number of consumer complaints pertaining to refunds for each airline each month.

Baggage

Claims for lost, damaged, or delayed baggage, charges for excess baggage, carry-on problems, and difficulties with airline claim procedure are included in this category. Data is available by the total number of consumer complaints pertaining to baggage for each airline each month.

Customer Service

This category includes complaints about rude or unhelpful employees, inadequate meals or cabin service, and treatment of delayed passengers. Data is available by the total number of consumer complaints pertaining to customer service for each airline each month.

Disability

Previously included as part of the Reservations, Ticketing and Boarding Category (thru 6/99), this category includes complaints about civil rights complaints by air travelers with disabilities. Data is available by the total number of consumer complaints pertaining to disabilities for each airline each month.

Advertising

These are complaints concerning advertising that is unfair, misleading or offensive to consumers. Data is available by the total number of consumer complaints regarding advertising for each airline each month.

Tours

This category includes complaints about problems with scheduled or charter tour packages. Data is available by the total number of consumer complaints pertaining to tours for each airline each month.

Animals

This category, added in October 2000, tracks customer complaints about loss, injury, or death of an animal during air transport by an air carrier. Data is available by the total number of customer complaints regarding animals for each airline each month.

Other

Data regarding consumer complaints about frequent flyer programs, smoking, credit, cargo problems, security, airport facilities, claims for bodily injury, and other problems not classified above are included in this category. Smoking and credit elements, previously separate elements, were added to this general category as of 9/99. Data is available by the total number of consumer complaints regarding other problems for each airline each month.